Revision History

Version 17.5.0

SPECT3D:

- FLASH native HDF5 hydro output is now supported. Some notes:
  - Single-time-step FLASH output files may be opened directly (the file extension filter will need to be changed to "All Files (*.*)" in order to see them in the browser). Alternatively, if a FLASH output .log file is opened (default browser file extension filter), all time steps from that FLASH file (as long as they are found in the same directory as the .log file) will be loaded.
  - FLASH output files store species (materials) as volume fractions, whereas it is likely that an Exodus converter changes them to partial densities. Thus, if a user is comparing SPECT3D runs done with native FLASH output vs. converted Exodus output, they may need to have "Partial densities" selected in the "Model" drop-down menu for the Exodus one, and "Volume fraction" for the FLASH one, even though the hydro variable has the same name.
  - If FLASH was run without species specified, the mass density variable can be selected for Spect3D "Material Fraction", specified as a Partial Density.
  - This is still considered a beta version for FLASH support. While all geometries except for 1D Cylindrical have been tested, for initial usage of this FLASH support, some "sanity checks" will be prudent (e.g. plotting hydro data, and/or analysis of expected spectral results). Please contact Prism with any error reports.
- Fluid velocity units of cm/micro-second are now supported.
- Bug fixes:
  - For LILAC hydro files, there was a bug which could lead to mismatching of materials to their respective layers in the hydro data. This is fixed.
  - For LILAC hydro files, selecting only a subset of materials from the hydro data led to crashes. This is fixed.
  - In recent versions of Spect3D, plotting hydro data with multiple regions could result in reversal or ordering of the regions. E.g., data for a region at the center of a radial plasma would be plotted as the outer region, and vice versa. This only affected plots, and did not affect simulations. It has been fixed.

SpectraPLOT:

- Plot manipulation speed has been greatly increased for 2D high resolution plot widgets.
- Bug fixes:
  - Mac line plots no longer shift when moved offscreen.
  - Mac window staining bug has been fixed.